

PY1104-CPLR

economical coupler to connect adjacent ends of two pieces of conduit in fluid flow communication.

It is another advantage of the invention to provide a coupler that can be permanently attached to conduit.

It is a further advantage of the invention to provide a coupler that is detachable such that the coupler and/or the conduit may be reused.

It is yet another advantage of the invention to provide a coupler that can be easily used with conduit of various diameter by having one or more coupling members such that one coupler may be used alone, or as many couplers as necessary may be configured together to completely wrap around the outer surface of large(r) diameter conduit.

These and further objects of the present invention will become apparent to those skilled in the art to which this invention pertains and after a study of the present disclosure of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an isometric view of the invention showing the coupler in the unwrapped condition;

Fig. 2. is another isometric view of the invention showing the coupler in the unwrapped condition;

Fig. 3. is an isometric view of the invention showing the coupler in the wrapped condition;

Fig. 4 is another isometric view of the invention showing the coupler in the wrapped condition;

Fig. 5 is a top plan view of the coupler showing the outer surface and the cooperating attaching components;

Fig. 6 is a side plan view of the coupler showing the arcuate nature of each of the coupling members, the hinging structure and the attaching components;

Figure 5A is a section view illustrating the ridges of the first attaching component and the cavity or slot of the second attaching component as well as the hinge geometry;

Figs. 6C, 6D, 6E and 6F show various detail indicated in Fig. 5A;

Fig. 6B shows an enlarged section view of a portion of conduit with the coupler attached;

Fig. 6G is an enlarged view of the coupling mechanism coupled around a conduit;

Fig. 7 is an isometric view of the invention showing the coupler in the wrapped condition around one piece of corrugated conduit;

Fig. 7A is a section view of the invention showing the coupler in the wrapped condition around one piece of corrugated conduit; and

Fig. 8 is a single coupling member having a length, a width and an inner surface, wherein the length of the inner surface is defined by an arc of a number of degrees, which number of degrees is variable and determinable and a function of the conduit diameter which is to be coupled.